



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## EDUCATIONAL WRITINGS

---

Some of the most important changes which have been made in the school program in recent years are those which have introduced courses giving special training for the trades and for commercial work. Vocational courses have been demanded by employers and by students. The effort has been made on the part of school people to organize such courses in accordance with the needs of the communities in which the schools are located. There has, however, been very little systematic study of the problem, either through an analysis of the life of the community or through a study of the methods of the courses themselves. The result is that schools have undertaken a great variety of experiments in industrial education. We have now arrived at a period when this type of training is evidently to be subjected to a careful analysis. A number of reports of surveys have just been published, giving to the educational world the results of investigations extending over the past two years. Indeed, it is a notable fact that the body of good scientific literature on industrial education has been so enlarged during the last two months that from this point on any organization of industrial courses must be based on a type of information heretofore unavailable.

The National Society for the Promotion of Industrial Education is to be credited with the first steps in this field. Secondly, the Cleveland Survey is issuing several monographs on the various trades, which follow immediately upon the appearance of the two reports of the National Society.

Part of this published material will appeal to the teachers in secondary schools more than it does to teachers in elementary schools. Indeed, until recently the problem of vocational education has been thought of as a high-school problem. It has been natural that this should be so, because the legal age when children can enter industry is beyond the assumed age of children completing the elementary course. As the studies have gone forward, however, it has become increasingly evident that the whole school

course is affected by the demands for a better organization of vocational preparation. Furthermore, the age of fourteen falls, for many children, within the period of elementary schooling. The teacher and supervisor in the elementary schools are therefore profoundly interested in all aspects of the problem of vocational training.

Incidentally it should be noted that the National Society in organizing its surveys has taken a step which is of great importance not only to the problem of industrial education, but to the whole study of education. Formerly the National Society devoted itself to a campaign for legislation in the different states. This campaign was based upon the urgent practical demand for better preparation of boys and girls going into the industries. Manufacturers were very loud in their complaints that the school was not meeting the problem which to them was of major importance. It was the belief of many careful students that the campaign for the enactment of laws was premature in that there was at hand no adequate body of information to determine what kind of education was really needed in order to prepare children to go into the industries. When the National Society turned its attention from its campaign of legislation to a campaign of investigation, it recognized clearly the modern demand for a scientific basis of action. Hereafter the example of the National Society can be cited whenever anyone becomes over-urgent in his efforts to carry out a practical program before he has had an opportunity to investigate carefully the problems to which his practical program applies. It can safely be said that the National Society has done more in the past two years by its investigations for the genuine promotion of industrial education than has been accomplished by its earlier campaign of legislation.

The first report of the society is one which presents the results of a survey of Richmond, Virginia. Two years ago the National Society met in that city and listened to the findings of a commission which had been at work for the greater part of a year in studying the industries of Richmond and the school opportunities offered to children who were being prepared for the trades. This Richmond report<sup>1</sup> contains a detailed analysis of the various trades that are

<sup>1</sup> *Vocational Education Survey of Richmond, Virginia*. Bulletin of the United States Bureau of Labor Statistics, Whole Number, 162. Miscellaneous Series, No. 7, 1915. Pp. 333.

practiced in the city. These trades are analyzed with reference to the number of men engaged in them, the kind of training which they have, and the kind of training which they ought to receive. The relation between school work and the trades is constantly brought out by statements of the wishes of employers in regard to the training of their employees and by statements with regard to the actual experiences of those who are in the trades.

It will not be possible in this brief review to canvass the findings in detail. It may be interesting to select one or two brief paragraphs which set forth the educational requirements for some of the building trades. It is stated on p. 153 that:

The bricklayer should have at least a complete grammar-school and pre-vocational training, and it may be noted that as a rule he cannot advantageously enter the trade as an apprentice until his sixteenth year.

On p. 157 it is stated that the stonecutter should have qualifications as follows:

The apprentice to this trade should receive a complete grammar-school education and some industrial training. He should receive instruction in freehand drawing, design, and blue-print reading. The boy should be specially adapted, have dexterity, patience, and be mentally alert.

The form in which the analysis of the trades is presented in this report is such as to bar the ordinary reader from the use of the document. Long technical tables and analyses give the results of an elaborate study. Undoubtedly some careful student of education will utilize this material for a more popular and illuminating discussion of the findings. There is here a great mass of material which will be very valuable to anyone organizing courses for these different trades, and the achievement which this report marks is to be described by the statement that henceforth industrial education has a substantial scientific foundation for the description of the needs of children who are preparing for the trades.

The educational section of the Richmond report depicts a situation which is probably similar to the situation in many other cities. There are no adequate funds for industrial education in the city, and there is no adequate legislation for keeping the boys and girls in school long enough to secure the advantages of trade training. The report, therefore, urges various methods by which money can

be secured for the enlargement of industrial opportunities. Either the city itself should provide more money or it should secure the aid of the state. This latter mode of providing for industrial education is legitimate in view of the fact that the great cities of a state carry on the industries for the whole community. It is hardly fair that these congested centers of population should bear the whole cost of training those who in later life are to contribute to the welfare of the whole state. A similar argument can, of course, be made for agricultural education in the rural districts, but in the main the expenditures demanded in the large cities are very heavy in proportion to their population.

The special problem of compulsory attendance requires more attention in a southern state like Virginia than would be required in one of the northern states.

Finally, it is to be noted that the recommendations with regard to trade courses made by the Richmond commission called for short-term classes in a variety of different subjects. Indeed, the report emphasizes the necessity of giving a good deal of this work in night schools, in continuation classes, and in part-time classes. The difficulty of organizing a full-day school for the trades is discussed and the recommendation for such a school is not made because of the expense of organizing such a school and because of the difficulty of getting attendance for such a school.

On the other hand, great emphasis is laid upon the importance of assimilating into the school system certain private foundations which are attempting to deal with the industrial problem.

The reader of the report gets the impression that it is of great importance in the eyes of the commission that all of this work should be co-ordinated and based upon the findings which have been set forth with regard to the different industries. In short, this elaborate and technical report calls for a thoroughgoing reorganization of the methods of instruction in vocational classes. At the same time, the recommendations of the commission make it clear that they believe in a good deal of prevocational work. The elementary courses can be formulated, especially in the upper years of the elementary school, so as to give very definite preparation for practical activities. This is true not only for boys, but also for girls.

The second survey made by the National Society, in Minneapolis,<sup>1</sup> Minnesota, is different in its form and different in its motives. Minneapolis has a fund of money which was left by Mr. Dunwoody and his widow to provide an institution for the industrial training of the boys and girls of Minneapolis and of the state. The Dunwoody Institute, which was created by this legacy, was an active participant in the Minneapolis survey. Furthermore, the city of Minneapolis was prepared to co-operate in such a survey because of an investigation made some years ago by the teachers of Minneapolis and some of the philanthropic organizations of that city of cases of children who were leaving school because of the inadequacy of the course of study offered in the schools.

The Minneapolis report differs also from the Virginia report in the form of its presentation. It is not an elaborate, analytical statement of the different trades, but rather a running description of these trades and the demands made of those who are to enter upon them. The book is a very readable statement of the characteristics of the different trades and will be useful in presenting the case to students as well as to teachers.

There are certain general chapters in the book which show a broader view of industrial education than that which is exhibited in the earlier survey. Thus there is a chapter on "What Vocational Education Is Needed for Non-commissioned Officers of Industry." This chapter discusses the different levels of industrial organization and points out the need of a group of trained workers who shall be subordinate to the managers, but superior to the ordinary laborers. There is a chapter on art education in industry which sets forth vigorously the demand for a broader view of industries than that which is gained through apprentice work in a shop. Every industrial worker can complete his work with a view to its artistic character as well as with a view to its mechanical perfection. There is a chapter on home gardening and elementary agriculture in which the plea is made for an education of the worker which shall have no relation whatsoever to his trade activities, but shall better qualify him to use his leisure time in productive activities which will contribute to his home life.

<sup>1</sup> *Report of the Minneapolis Survey for Vocational Education.* National Society for the Promotion of Industrial Education, Bulletin No. 21, 1916. Pp. 697.

Such chapters as these, supplementing the analysis of the various trades, broaden the conception of vocational education and call attention to the difference between a strictly vocational school and a school which has in mind the improvement of workers along all lines. Indeed, in the earlier chapters of this report where an analysis is made of the school situation in Minneapolis it becomes evident that the Dunwoody Institute will become an important center in organizing not a narrow, but rather a broad, form of industrial education.

The first part of the book is devoted to certain general recommendations and to a study of the Minneapolis school system. One phase of the problem of industrial education may be selected from these recommendations for special comment. Again and again emphasis is laid upon the fact that vocational education is not primarily intended for retarded children. The recent discussions of trade courses have laid, perhaps, undue emphasis upon the advantage of taking the child who is unsuccessful in ordinary work out of the conventional academic courses and putting him into courses where he will get more handwork. There can be no doubt at all that the retarded child is very frequently benefited by removal from the conventional courses in which he is failing, but this fact should not lead to the general impression that anyone who goes into a technical course goes because he is not successful in intellectual work. Indeed, if the trades are to be raised to the highest level, they should receive the services of the brighter children in the grades, and anything that can be done to raise the intellectual level of those who are going into industrial life will be of service to the community and will exhibit clearly the importance of the school to industry.

A contrast suggested in the foregoing discussion between the educational situation in Minneapolis and the educational situation in Richmond serves to emphasize the fact that industrial education can be introduced into any school system only after a careful study of the resources of that particular community. Minneapolis is fortunate in being able to enter upon a very much more elaborate program than is Richmond, Virginia. That city is handicapped, as indicated above, by lack of funds and also because the organiza-

tion must be of a very limited type. Minneapolis, on the other hand, has great resources for this type of training and can expect to meet the needs which have been pointed out by this commission with efficient and complete courses in the Dunwoody Institute.

The second report of the National Society will, therefore, seem to many readers to present a program too elaborate for the ordinary city, but it will serve as an example of what may be done where funds are to be had; and a clear appreciation of the need of such training has been established by earlier investigations as well as by the present investigation.

The third publication to which reference may be made is the series of monographs<sup>1</sup> published by the Cleveland Survey. Three of these have already been issued. These three volumes introduce a series of nine reports which will be printed on the largest occupations in Cleveland and on the general problem of wage-earning. Each of these monographs is written in a style which will make its appeal to the ordinary reader as well as to the technical student of vocational education. Boys and girls who are expecting to enter the different activities described will profit greatly by a reading of these books and they will be able to do so because of the form in which the material is presented.

As a matter of evolution in the form of presentation, it is interesting to note that this last series of publications differs radically from the Richmond survey and is an improvement on the Minneapolis report.

*Department Store Occupations* gives a very careful picture of the kinds of jobs in department stores, their regularity, pay, and physical effects. The differences in these respects are impressed as between the downtown department stores, five-and-ten-cent stores, and neighborhood stores. Charts are given with the usual steps of promotion for boys and girls, men and women. Sales girls taken as a whole earn more than telephone and telegraph operators

<sup>1</sup> *Department Store Occupations*. By Iris Prouty O'Leary. Published by the Survey Committee of the Cleveland Foundation, 1916. Pp. 127.

*Boys and Girls in Commercial Work*. By Bertha M. Stevens. Published by the Survey Committee of the Cleveland Foundation, 1916. Pp. 181.

*Railroad and Street Transportation*. By Ralph D. Fleming. Published by the Survey Committee of the Cleveland Foundation, 1916. Pp. 77.



and other female employees in stores except clerks. They earn less than workers in women's clothing factories, clerks, and millinery workers. The salesmen earn more than clerks in stores, workers in steel mills, automobile factories, foundries, and machine-shops.

The saleswomen are less regularly employed than any of the other women compared except workers in millinery and lace.

A chapter is devoted to telling how to get a job in a department store. Examples of courses for salespeople in various departments are given in detail. They include silks, upholstery, corsets, shoes, and delivery. Much of this knowledge can be secured on the job, much by class work. But because of the great variety of articles sold, the instruction should be given in short unit courses, each unit dealing with one part of the trade and complete in itself. These are recommended for individual stores, groups of stores, and the public schools.

The second volume of the Cleveland report deals with boys and girls in commercial work. This volume supplements the earlier reports in that it gives a much more complete account of the clerical positions than can be found in any of the earlier discussions. Furthermore, this volume discusses at some length the courses of study offered in the commercial high school of Cleveland, and in this discussion takes up a number of the crucial general problems of commercial education.

The distinction between the commercial outlook for boys and girls is clearly drawn in the book. Thus, boys can make very little use of stenography. On the other hand, the chief demand for girls is to be found in positions where they depend upon stenography for securing and maintaining their places. The differences in opportunity of promotion for boys and girls are fully discussed. It is shown that girls who enter commercial pursuits in clerical positions are likely to remain in these positions, while the ambition of boys is to get out of a clerical position and into a managerial position.

These general statements are illuminating when one studies the course which is offered to both boys and girls in the ordinary commercial high school. Such a course, especially the one which is offered in the Cleveland commercial high school, is adapted only to the needs of girls. The boys who were asked about their train-

ing after they had attempted to make use of this training in the commercial world complained that there was no opportunity for them to use what they had acquired in the schools, whereas the girls were very well satisfied with the training which they had received.

The proofs that present training fits girls but not boys for business are many. Over one hundred employers have been interviewed and their opinions and practices are summarized. "Girls are used as they are received, for they have been shaped very well for the places they are to fill. Employers disregard the preparation of boys and have proceeded as if dealing with unformed material."

Wages always offer an index of value in business. See what they show about the training of girls and boys. All girls with commercial training are divided into two classes, those with grade-school preparation and those with high-school preparation. More than half the high-school girls received advances of \$4.00 per month or more in two years' time. None of the grade-school girls did. Less than a fourth of the high-school girls, but more than half of the grade-school girls, received no raise.

Compare the boys. Those working the same time were divided into those earning \$20.00 or more per week and those earning less than \$20.00. Education has made no apparent difference in wage-earning. Among those with any given training there were as many earning small as large wages. Of every hundred in each class, the following numbers had received the different amounts of training:

TABLE I

|  | Receiving<br>\$20 and Over | Receiving<br>Less than \$20 |
|--|----------------------------|-----------------------------|
| Advanced education without business training . . . . . | 43                         | 40                          |
| Grade education without business training . . . . .    | 29                         | 31                          |
| Advanced education and business training . . . . .     | 17                         | 17                          |
| Grade education and business training . . . . .        | 11                         | 10                          |
| Not ascertained . . . . .                              |                            | 2                           |
| Total . . . . .  | 100                        | 100                         |

Wages show that girls' training for business is valuable and that boys' training does not produce.

The experience of the boys and girls at work backs up the opinions of employers and wage results. Interviews were held with one hundred graduates of a commercial school, good as such schools go.

Of sixty girls, only one expressed general dissatisfaction with her training. Of forty boys, only ten approved of it in an unqualified way. Typical comments of boys are:

"It's too good for it! Boys who never went to commercial school are doing this work the same as me."

"I could have gotten that knowledge quicker than in four years. Business men want experience more than schooling, anyway."

"Employers don't make a note of it whether you went to a commercial school or not."

"I didn't need a commercial training to hold down this \$40 job."

The positions held by girls and boys give further proof that present training fits girls and misfits boys. The two largely do different kinds of work. No wonder the same schooling gives different results.

TABLE II  
NUMBER OF MEN AND WOMEN IN EVERY ONE HUNDRED  
IN EACH KIND OF JOB

|                        | Men | Women |
|------------------------|-----|-------|
| Machine operators..... | 1   | 24    |
| Stenographers.....     | 9   | 36    |
| General clerical.....  | 11  | 19    |
| Bookkeepers.....       | 11  | 21    |
| Clerks.....            | 68  | 1     |
| Total.....             | 100 | 101*  |

\* Due to neglect of fractions.

This table shows that boys for the most part go into positions where general abilities need to be applied to commercial work. Girls take jobs requiring specialized training or knowledge. As a result, the following recommendations are given for future commercial education:

A girl needs, chiefly, specific training in some one line of work. She has a choice among stenography, bookkeeping, and machine operating.

A boy needs, chiefly, general education, putting emphasis on writing, figuring, and spelling; general information; and the development of certain qualities and standards.

For students electing to go into commercial work, general education may be taught more effectively through the medium of commercial subjects than through academic ones.

Boys' training looks forward to both clerical work and business administration; but, as clerical work is a preparation for business and is likely to occupy the first few years of wage-earning, training should aim especially to meet the needs of clerical positions.

The third volume, on *Railroad and Street Transportation*, paints a very attractive picture of the opportunities for the boy who goes into railroading. The organization of the railroads is described in simple terms, and the opportunities for desirable positions are set forth in such a way as to stimulate the interest of any ambitious boy.

On the other hand, the student of education who reads this volume will be somewhat discouraged in his effort to correlate school work with the opportunities that are described in this book. School training fits only in a very general way for railroad opportunities. When we come to other forms of transportation, such as street-car service and trucking, the relation of education to wages is still more remote. The reader begins to realize that the fundamental tools of ordinary life which the pupil acquires in the lower grades, in the reading class, the arithmetic class, and the writing class, include nearly all of the elements of training which the ordinary worker needs. There is here and there in the book a suggestion that science would be of some help, but, when one thinks of the difficulties that have been encountered in recent years in introducing nature-study into the grades, this suggestion offers very little encouragement to those who wish to see the school and practical activities closely united.

Indeed, summarizing the impressions that the reader receives from all of the reports to which reference has been made in this review, one feels very keenly the lack of co-ordination between the present educational system and the industrial world. The industrial world is specialized and its various characteristics are worked out with a view to employing all sorts of miscellaneous people with a

training that was in no wise directed at the specific problem of the trade or business. The business world has only the crudest devices for training its employees in the special positions which they are to occupy. Competition and readjustment are the easy devices by which the business world solves its problem of selecting adequate workers and rejecting those who cannot perform its tasks.

In the meantime, the school has a general course in the elements of language and number which it can offer to anyone, but beyond this point it can do little without resorting to short courses in special subjects.

This picture of the inco-ordination of the schools with the industries gives a very clear explanation of why boys leave school early and why the commercial world is very critical of the kind of training that is given in the schools. These reports will stimulate much productive thinking and there can be very little doubt that in the long run we shall have a reorganization of school work in the interests of a better co-ordination between the school courses and the demands of industry.